

CLAIMS:

1. A method for configuring default values of a network device, comprising:
  - determining whether the default values are obtained through a microprocessor interface or a memory interface;
  - when it is determined that the default values are obtained through the memory interface, performing the steps of:
    - receiving a header from a memory through the memory interface;
    - determining from the header whether any default value of the network device should be updated;
    - fetching at least one configuration instruction from the memory when the determining step determines that the network device should be updated;
    - interpreting said at least one configuration instruction; and
    - changing a register default value of said default values corresponding to said interpreted at least one configuration instruction; and
    - when it is determined that the default values are obtained through the microprocessor interface, changing said default values according to data received through the microprocessor interface.
2. The method according to claim 1, wherein said method further comprises monitoring a reset signal to determine whether the default values of the network device should be updated.
3. The method according to claim 1, wherein said step of determining from the header whether any default value of the network device should be updated

comprises determining from the header a number of the default values of the network device that should be updated.

4 The method according to claim 3, wherein said step of fetching at least one configuration instruction from the memory comprises fetching a number of configuration instructions from the memory equal to the number of the default values of the network device that should be updated.

5. The method according to claim 1, wherein said step of determining from the header whether any default value of the network device should be updated comprises determining a key value from said header and comparing said key value with a number pre-defined inside network device to determine whether any default value of the network device should be updated.

6. The method according to claim 1, wherein said at least one configuration instruction comprises a plurality of configuration instructions and the step of fetching at least one configuration instruction from the memory is repeated until all of the plurality of configuration instructions have been fetched.

7. The method according to claim 1, wherein said memory interface comprises an EEPROM interface and the step of receiving a header from a memory through the memory interface comprises receiving a header from an EEPROM through the EEPROM interface.

8. A network device, having default values that are flexibly configurable, comprising:

a microprocessor interface;

a memory interface;

5 a register file containing the default values for the network device; and

a configuration instruction interpreter;

wherein the memory interface is configured to receive configuration instructions, with each configuration instruction of said configuration instructions being composed of an address index and a corresponding value, wherein the configuration

10 instruction interpreter is configured to interpret the received configuration instructions such that the corresponding values are mapped corresponding default values of the register file, and wherein the network device is configurable to set default values based on data received through either the microprocessor interface and the memory interface.

9. The network device according to claim 8, wherein said configuration instruction interpreter is configured to monitor a reset signal to determine if the default values should be updated.

10. The network device according to claim 8, wherein said configuration instruction interpreter is configured to determine from the header a number of the default values of the network device that should be updated.

11. The network device according to claim 10, wherein said configuration instruction interpreter is configured to fetch a number of configuration instructions from the memory equal to the number of the default values of the network device that should be updated.
12. The network device according to claim 8, wherein the configuration instruction interpreter is configured to receive a header from the memory interface containing a key value from and configured to compare said key value with a pre-defined number to determine whether any default value of said default values should be updated.
13. The network device according to claim 8, further comprising a controller for setting one of the microprocessor interface and the memory interface through which data is received to change the default values.
14. The network device according to claim 8, wherein said memory interface comprises an EEPROM interface and the EEPROM interface is configured to receive configuration instructions from an EEPROM.
15. A network device, comprising:
- means for determining whether the default values are obtained through a microprocessor interface or a memory interface;
- means for receiving a header from a memory through the memory interface;

5 means for determining from the header whether any default value of the network device should be updated;

means for fetching at least one configuration instruction from the memory when the determining step determines that the network device should be updated;

means for interpreting said at least one configuration instruction;

10 means changing a register default value of said default values corresponding to said interpreted at least one configuration instruction; and

means for changing said default values according to data received through the microprocessor interface;

wherein said means for changing said default values according to data received 15 through the microprocessor interface is configured to change the default values when the means for determining whether the default values are obtained through a microprocessor interface or a memory interface determines that the default values are to be obtained through a microprocessor interface.

16. The network device according to claim 15, further comprises means for monitoring a reset signal to determine whether the default values of the network device should be updated.

17. The network device according to claim 15, wherein said means for determining from the header whether any default value of the network device should be updated comprises means for determining from the header a number of the default values of the network device that should be updated.

18. The network device according to claim 17, wherein said means for fetching at least one configuration instruction from the memory comprises means for fetching a number of configuration instructions from the memory equal to the number of the default values of the network device that should be updated.
19. The network device according to claim 15, wherein said means for determining from the header whether any default value of the network device should be updated comprises means for determining a key value from said header and means for comparing said key value with a number pre-defined inside network device
- 5 to determine whether any default value of the network device should be updated.
20. The network device according to claim 15, wherein said at least one configuration instruction comprises a plurality of configuration instructions and the means for fetching at least one configuration instruction from the memory is configured to repeatedly fetch configuration instructions until all of the plurality of configuration
- 5 instructions have been fetched.
21. The network device according to claim 15, wherein said means for receiving a header from a memory through the memory interface comprises means for receiving a header from an EEPROM through an EEPROM interface.